

A LIST OF ROBBER FLIES FROM COAHUILA, MEXICO (DIPTERA: ASILIDAE).

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While on a field trip during the summer of 1938 in northern Coahuila, Mexico, intended primarily for the purpose of obtaining vertebrates, some 220 specimens of Asilidae including 30 species were collected. The most collecting was done in and between two mountain chains extending north and south, the Sierra del Carmen on the west and the Sierra de los Burros on the east with Muzquiz as the most southern point attained. Specimens were also obtained as far north as the Coahuila-Texas border at Fuente and San Carlos.

This region of northern Mexico is quite similar in topography and vegetation to the Trans-Pecos area of western Texas. Specimens were collected at altitudes varying from about 800 feet in the Lower Sonoran Life Zone to near 7000 feet in the Transition Life Zone.

The writer wishes to thank Mr. Ernest G. Marsh, Jr., of the University of Texas, under whose direction the trip was undertaken, and Dr. Stanley W. Bromley for identifications.

The following is an annotated list of species from northern Coahuila, Mexico:

Leptogaster arenicolus James. Two specimens. Serrino, Rancho La Buena Vista, Sierra del Carmen, elevation 5500 feet, July 18. This delicate robber fly was taken in sweepings from a weedy pasture along an arroyo.

Ospriocerus abdominalis Say. Fifteen specimens. Sierra de los Burros, elevation 4000 feet, June 18; Sierra del Carmen at Puerta de la Goriona, elevation 4900 feet, July 13, Rancho La Encontada, elevation 5200 feet, July 22, and Mesa del Hillcoat, elevation 7000 feet, July 25. This species was especially abundant on the extensive flats surrounding the hacienda of the Rancho La Encontada.

Ospriocerus minos Osten Sacken. Two specimens. Sierra de los Burros, elevation 4000 feet, June 18; Puerta de la Goriona, Sierra del Carmen, elevation 4900 feet, July 13.

Stenopogon aeacidinus Williston. Four specimens. Rancho Las Ruscias, Muzquiz, elevation 1700 feet, August 3. This fly was a rather common one in the region around Muzquiz.

Stenopogon latipennis Loew. Three specimens. Fuente, elevation 800 feet, June 12; La Babia, elevation 2500 feet, June 20.

- Microstylum galactodes* Loew. One specimen. Sierra de los Burros, elevation 3000 feet, June 18. This fly was collected in the northern foothills of these mountains in typical Lower Sonoran county.
- Microstylum morosum* Loew. One specimen. Rancho La Buena Vista, Sierra del Carmen, elevation 5000 feet, July 13. This magnificent species was observed in weedy undrained areas on the broad flat which is surrounded by higher land of the Sierra del Carmen.
- Saropogon combustus* Loew. Four specimens. Sierra del Carmen at Serrino, Rancho La Buena Vista, elevation 5500 feet, July 18, and Rancho La Encontada, elevation 5200 feet, July 22.
- Diogmites angustipennis* Loew. One specimen. Rancho Las Ruscias, Muzquiz, elevation 1700 feet, August 3.
- Mallophora (Mallophorina) acra* Curran. Two specimens. La Babia, elevation 2500 feet, June 20; Rancho La Buena Vista, Sierra del Carmen, elevation 5000 feet, July 7.
- Mallophora (Mallophorina) prudens* Pritchard. Three specimens. Sierra del Carmen at Rancho La Buena Vista, elevation 5000 feet, July 7 and Mesa del Hillcoat, elevation 7000 feet, July 25.
- Promachus painteri* Bromley. Three specimens. Sierra del Carmen at Serrino, Rancho La Buena Vista, elevation 5500 feet, July 18, and Mesa de la Encontada, elevation 7000 feet, July 21.
- Promachus magnus* Bellardi. Two specimens. Rancho Las Ruscias, Muzquiz, elevation 1700 feet, August 3.
- Promachus giganteus* Hine. Seventeen specimens. La Babia, elevation 2500 feet, June 20. This is an abundant species in the Lower Sonoran Zone.
- Promachus oklahomensis* Pritchard. Two specimens. Sierra del Carmen at Rancho La Buena Vista, elevation 5000 feet, July 12, and Mesa del Hillcoat, elevation 7000 feet, July 25. This species is fairly abundant in weedy undrained areas on the broad flat previously mentioned.
- Erax candidus* Coquillett. One specimen. Sierra de los Burros, elevation 4000 feet, June 18.
- Erax pilosus* Hine. One specimen. Puerta de la Goriona, Sierra del Carmen, elevation 4900 feet, July 13.
- Erax belfragei* Hine. Two specimens. Serrino, Rancho La Buena Vista, Sierra del Carmen, elevation 5500 feet, July 18. This fly was taken in sweepings from weeds along an arroyo.

- Erax tuberculatus* Coquillett. Fifteen specimens. Sierra de los Burros, elevation 4000 feet, June 18; La Babia, elevation 2500 feet, June 20; Rancho La Buena Vista, Sierra del Carmen, elevation 5000 feet, July 7. This robber fly was collected in rocky environments.
- Erax barbatus* Fabricius. Twenty-five specimens. La Babia, elevation 2500 feet, June 20. This species was taken in arid desert regions around the mountains.
- Erax* sp. (*barbatus* group). Two specimens. La Babia, elevation 2500 feet, June 20.
- Erax armatus* Hine. Three specimens. Sierra de los Burros, elevation 4000 feet, June 18; La Babia, elevation 2500 feet, June 20; Rancho La Encontada, Sierra del Carmen, elevation 5200 feet, July 22.
- Erax argentifrons* Hine. Fifty specimens. Sierra de los Burros, elevation 4000 feet, June 18; La Babia, elevation 2500 feet, June 20; Sierra del Carmen at Rancho La Buena Vista, elevation 5000 feet, July 7, and Puerta de la Goriona, elevation 4900 feet, July 13; Rancho Las Ruscias, Muzquiz, elevation 1700 feet, August 3. This species is general in occurrence from the lowest to the highest regions.
- Erax texanus* Banks. Fifty-four specimens. San Carlos, elevation 950 feet, June 14; Sierra de los Burros, elevation 4000 feet, June 18; La Babia, elevation 2500 feet, June 20; Sierra del Carmen at Rancho La Buena Vista, elevation 5000 feet, July 7, and Puerta de la Goriona, elevation 4900 feet, July 13. This species was observed from the Rio Grande border south to Muzquiz.
- Erax grandis* Hine. Four specimens. Sierra de los Burros, elevation 3000 feet, June 18; La Babia, elevation 2500 feet; Rancho La Golondrina, Muzquiz, elevation 1600 feet, June 28. This fly is typical of the desert area.
- Erax* sp. near *willistoni* Hine. One specimen. Mesa del Hillcoat, Sierra del Carmen, elevation 7000 feet, July 25.
- Asilus compositus* Hine. Four specimens. Sierra del Carmen at Rancho La Buena Vista, elevation 5000 feet, July 7; Cañon del Hillcoat, elevation 7000 feet, July 10; and Mesa del Hillcoat, elevation 7000 feet, July 25. This species was taken in luxuriant vegetation.
- Asilus tenebrosus* Williston. Two specimens. Sierra del Carmen at Rancho La Buena Vista, elevation 5000 feet, July 7, and Cañon del Hillcoat, elevation 7000 feet, July 10.

Asilus avidus V. d. Wulp. One specimen. Rancho la Buena Vista, Sierra del Carmen, elevation 5000 feet, July 7.

Buckellia lutzi Curran. Two specimens. Serrino, Rancho La Buena Vista, Sierra del Carmen, elevation 5500 feet, July 18.
This species was collected in sweepings along a weedy arroyo.

A New Insect Introduction.—On April 11, 1939, the writer found an insect infestation on fenugreek (*Trigonella foenum-graecum* L.) and alfalfa (*Medicago sativa* L.) at Yuma, Arizona. This appeared to be the alfalfa weevil (*Hypera postica* Gullenhal). Specimens were sent to Mr. C. F. W. Muesebeck of the Bureau of Entomology and Plant Quarantine at Washington, D. C. Mr. Muesebeck referred the specimens to Mr. L. L. Buchanan for study. The latter determined them as *Hypera brunneipennis* Boheman, originally described from Egypt and also recorded from Ethiopia. So far as known, this is the first record of the collection of this insect in the United States.

Subsequent collections were made at intervals during the next two weeks. The weevils were found feeding on alfalfa and sour clover (*Melilotus indica* All.) in fields and ditch banks on both sides of a road for a distance of about eight miles. Larvae, pupae in cocoons and adults were collected.—LAWRENCE PAUL WEHRLE, University of Arizona, Tucson, Ariz.

BOOK NOTE.

Evolution of the Annelida, Onychophora and Arthropoda, by R. E. Snodgrass. (1938. Smithsonian Miscellaneous Collections, vol. 97, no. 6, pp. 1-159.)

Again Dr. Snodgrass adds to the knowledge of the metameric groups, their origin and relationships. To adequately discuss this paper would call for the same vast knowledge and deep acquaintance with the subject possessed by its author. Here, we merely cursorily point out the content of this monograph. Beginning with the hypothetical annelid ancestors, he traces the development of the three groups, supporting his findings by studies of early developmental stages of the embryo and other morphological evidence. A lengthy discussion of the conclusions derived from the evidence summarizes the results.

J. R. T.-B.